

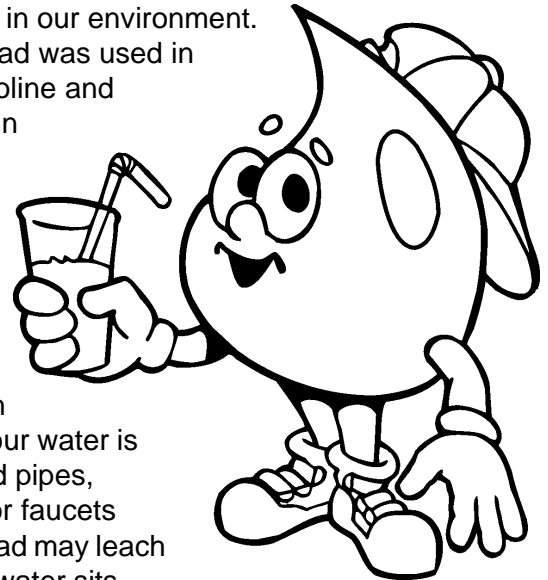
The Facts About Lead in Drinking Water

Potential Causes of Lead in Drinking Water:

- Lead pipes
- Copper pipes with lead solder
- Water sitting in lead or lead soldered pipes for several hours
- Soft, acidic water in conjunction with lead pipes or lead solder
- Lead in source water (occurs in rare instances)

You are most likely to have high levels of lead in your water if your water is soft or acidic and you have lead pipes, copper pipes with lead solder or faucets containing lead.

Lead is a common metal found in our environment. Before we knew its dangers, lead was used in many items such as paint, gasoline and fertilizers. Lead is rarely found in sources of drinking water. However, it can enter public and private drinking water systems through corrosion that occurs in lead service lines, plumbing and faucets.



You are most likely to have high levels of lead in your water if your water is soft or acidic and you have lead pipes, copper pipes with lead solder or faucets containing lead. Additionally, lead may leach into your drinking water if your water sits several hours in plumbing that contains lead materials.

What are the dangers of lead poisoning?

Lead can cause a variety of adverse health conditions when people are exposed to it at elevated levels. Short term exposure can cause interference with red blood cell chemistry and cause delays in normal physical and mental development in babies and young children. Long term exposure to lead can cause stroke, kidney disease and cancer. Children and pregnant women are at highest risk for the damaging effects of lead. It's important to know if there is lead in your drinking water.

How do I have my water tested for lead?

Ask your public water provider for information on how to have your water tested for lead. For additional information, you can call the DHEC's Bureau of Water at (803) 898-4300.

How can I remove lead from my drinking water?

If a water test indicates that the drinking water drawn from a tap in your home contains lead above 15 parts per billion or .015 milligrams per liter (mg/l), you should take the following actions to treat for the elevated level.

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- Flush each tap before using water from it for drinking or cooking purposes. To flush your tap, let the water run about 30 seconds to allow the release of water that has been standing in the lines. This water can be used to water plants or wash dishes. Lead is not absorbed through the skin, so don't be concerned about bathing and showering with water that might contain lead. Try to use cold tap water for drinking and cooking. Do not cook with or drink water from the hot water tap. Hot water can dissolve lead more quickly than cold water. If you need hot water, draw it from the cold tap and heat it on the stove.
- Remove loose solder and debris from the plumbing in new homes or areas where plumbing recently has been replaced. This can be done by removing the faucet strainers from all taps and running the water for three to five minutes. Periodically remove the strainers and flush out any debris that has accumulated.
- Replace lead materials with lead-free ones. If your copper pipes have been joined with lead solder since its ban in 1988, notify the plumber who did the work and ask to have it replaced. Lead solder initially looks dull gray, but turns shiny when scratched with a key.
- Find out whether the service line that connects your home or apartment to the water main is made of lead. A licensed plumber can check to see if your home's plumbing contains lead solder, lead pipes, or pipe fittings that contain lead.
- Have an electrician check your wiring. If grounding wires from the electrical system are attached to your pipes, it can increase corrosion. Check with a licensed electrician or your local electric code to determine if wiring can be grounded elsewhere. **Do not attempt to change the wiring yourself.** Improper grounding can cause electrical shock and fire hazards.

If you find your water has high lead levels and you are concerned that your child might be affected, contact your private physician or your county health department for information on how to get a blood lead test.

Treatment of Lead in a Public Water System

Public water systems are working to control the corrosiveness of their water if the level of lead at home taps exceeds the .015 mg/l action level. The systems are implementing an optimum corrosion control treatment plan. Corrosion control allows for a decrease in the amount of lead that is leached from a piping system. This decrease is accomplished by adjusting pH, and alkalinity, or calcium in an effort to make the water less corrosive or by adding a phosphate or silica-based inhibitor to form a protective film on the interior of pipes and fixtures.

For more information about lead in drinking water, contact DHEC's Bureau of Water at **(803) 898-4300**.



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